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THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

C/o Royal Melbourne
Hospital Post Office,
MELBOURNE, Victoria.
Australia.

23rd September, 1955

Dr. J. Lederberg,
Department of Genetics,
University of Wisconsin,
MADISON, Wisconsin.
U.S.A.

Dear Lederberg,

I was delighted to hear from Rubbo that there is a reasonable possibility of your coming to Australia in 1957. We shall be most happy to provide you with a bench and a temporary collaborator at the Institute if you would like to get the "feel" of influenza virus genetics.

At the present time we have a nice experiment under way, which I hope will give us a clearer view of the nature of virulence in influenza viruses. It is a cross between a strain NWSE with 3 high level virulences (mouse intracerebral mouse intranasal and lethal effect on the embryo) and MEL which has minimal virulence of each type. It amounts simply to repeated analysis of pure clones from the first cycle fluid. I am beginning to feel sure that there are two different orders of activity concerned with virulence, which I am calling somatic (concerned with entry of virus into a new cell) and reproductive (mediated through wholly intracellular processes).

I presume you have seen my colleague, G.L. Ada's notes in "Nature" on the RNA of the influenza virus. I think his work makes influenza (as a wholly RNA-based system) of particular interest from the general biological point of view.

I should very much like to have a chance for some extended discussion with you on these matters and I do hope you and Mrs. Lederberg can make the trip.

With kindest regards,

Yours sincerely,

F. M. Burnet

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